

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An amplifying circuit comprising:

an amplifier amplifying a signal received through an input terminal, and
outputting the signal through an output terminal; and

a control circuit turning at least one of an input impedance and an output
impedance of said amplifier into a high impedance, wherein

said control circuit is comprised of an inductor and a switch, said inductor and said
switch are electrically connected in series to each other, and further electrically connected in an
AC manner between said input or output terminal and a grounded voltage, wherein

said switch is comprised of a field effect transistor, wherein

said inductor has an inductance resonating in parallel with a parasitic capacity of said
amplifier.

2. (canceled).

3. (canceled).

4. (canceled).

5. (canceled).

6. (withdrawn): The amplifying circuit as set forth in claim 1, wherein said control circuit is comprised of:

at least two transmission lines including at least a first transmission line electrically connected at one end thereof to said input or output terminal, and a second transmission line grounded at one end thereof, a total length of said at least two transmission lines being equal to $K \times S$ wherein K indicates an odd number, and S indicates a quarter of a wavelength of said signal; and

a switch for selecting whether said input or output terminal is electrically connected to a grounded voltage through a transmission line having a length of $K \times S$ or through a transmission line having a length shorter than $K \times S$.

7. (withdrawn): The amplifying circuit as set forth in claim 6, wherein said transmission line having a length shorter than $K \times S$ acts as an inductor having an inductance resonating in parallel with a parasitic capacity of said amplifier.

8. (withdrawn): The amplifying circuit as set forth in claim 1, wherein said amplifier is comprised of two field effect transistors electrically connected in cascode to each other.

9. (original): The amplifying circuit as set forth in claim 1, further comprising a field effect transistor electrically connected in series between said amplifier and a power source, said field effect transistor interrupting a current from flowing to said amplifying circuit from said power source when said amplifying circuit is off.

10. (withdrawn): The amplifying circuit as set forth in claim 1, wherein said amplifying circuit is comprised of a differential amplifying circuit, and further comprising a field effect transistor as a constant-current source between said amplifier and a grounded voltage.

11. (currently amended): A gain-variable amplifying circuit comprising at least two amplifying circuits electrically connected in parallel to each other and having gains different from one another,

said amplifying circuits each comprised of :

an amplifier amplifying a signal received through an input terminal, and outputting the signal through an output terminal; and

a control circuit turning at least one of an input impedance and an output impedance of said amplifier into a high impedance,

wherein a gain is controlled by turning at least one of said input and output impedances of an amplifying circuit(s) other than a selected amplifying circuit, into a high impedance, wherein

said control circuit is comprised of an inductor and a switch, said inductor and said switch are electrically connected in series to each other, and further electrically connected in an AC manner between said input or output terminal and a grounded voltage, wherein

said switch is comprised of a field effect transistor, wherein

said inductor has an inductance resonating in parallel with a parasitic capacity of said amplifier.

12. (canceled).

13. (canceled).

14. (canceled).

15. (canceled).

16. (withdrawn): The gain-variable amplifying circuit as set forth in claim 11, wherein said control circuit is comprised of:

at least two transmission lines including at least a first transmission line electrically connected at one end thereof to said input or output terminal, and a second transmission line grounded at one end thereof, a total length of said at least two transmission lines being equal to $K \times S$ wherein K indicates an odd number, and S indicates a quarter of a wavelength of said signal; and

a switch for selecting whether said input or output terminal is electrically connected to a grounded voltage through a transmission line having a length of $K \times S$ or through a transmission line having a length shorter than $K \times S$.

17. (withdrawn): The gain-variable amplifying circuit as set forth in claim 16, wherein said transmission line having a length shorter than $K \times S$ acts as an inductor having an inductance resonating in parallel with a parasitic capacity of said amplifier.

18. (withdrawn): The gain-variable amplifying circuit as set forth in claim 11, wherein said amplifier is comprised of two field effect transistors electrically connected in cascode to each other.

19. (previously presented): The gain-variable amplifying circuit as set forth in claim 11, further comprising a field effect transistor electrically connected in series between said amplifier and a power source, said field effect transistor interrupting a current from flowing to said amplifying circuit from said power source when said amplifying circuit is off.

20. (withdrawn): The gain-variable amplifying circuit as set forth in claim 11, wherein said amplifying circuit is comprised of a differential amplifying circuit, and further comprising a field effect transistor as a constant-current source between said amplifier and a grounded voltage.